

CLAIMS

WHAT IS CLAIMED IS:

5 1. A composition comprising:

- a) a cellulose based solid matrix or a micromesh synthetic plastic matrix; and
- b) one or more vectors,
wherein said matrix is not coated or encased with polystyrene.

10 2. The composition according to claim 1, wherein said matrix comprises a composition comprising a weak base, a chelating agent, an anionic surfactant or anionic detergent, and optionally uric acid or a urate salt, wherein said composition is adsorbed on or incorporated into said solid matrix.

15 3. The composition according to claim 1, wherein said matrix is not coated or encased with a protective coating.

20 4. The composition according to claim 1, wherein said matrix is FTA™ paper or derivatives, variants or modifications thereof.

5. The composition of claim 1, further comprising one or more polymerases.

25 6. The composition of claim 5, wherein said polymerases are DNA polymerases.

7. The composition of claim 6, wherein said DNA polymerases are thermostable DNA polymerases.

30 8. The composition of claim 1, further comprising one or more host cells.

9. The composition of claim 8, wherein said host cells are chemically competent or electrocompetent.

10. The composition of claim 1, further comprising one or more components selected from the group consisting of one or more primers, one or more polymerases and one or more nucleotides.

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11. A method for storage of one or more vectors comprising:

- a) contacting said vectors with a cellulose based solid matrix or a micromesh synthetic plastic matrix; and
- b) storing said vectors contacted with said matrix,

10 wherein said matrix is not coated or encased with polystyrene.

12. The method according to claim 11, wherein said matrix comprises a composition comprising a weak base, a chelating agent, an anionic surfactant or an anionic detergent and optionally uric acid or a urate salt.

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13. The method of claim 11, wherein said contacting is accomplished under conditions sufficient to associate said vectors with said matrix.

14. The method of claim 11, further comprising purifying or isolating said vectors
20 from said matrix.

15. The method according to claim 11, further comprising removing said vectors from said matrix for subsequent treatment.

25 16. The method according to claim 15, wherein said treatment is selected from the group consisting of digestion, synthesis, amplification, sequencing, transformation or transfection of said vectors.

30 17. The method according to claim 11, further comprising treating or manipulating said vectors.

18. The method according to claim 17, wherein said treatment or manipulation is selected from the group consisting of digestion, synthesis, amplification, sequencing, transformation or transfection of said vectors.

5 19. The method according to claim 18, wherein said treatment is amplification by polymerase chain reaction.

20. The method of claim 18, wherein said treatment is transformation or transfection.

10 21. The method of claim 20, wherein said vectors are transformed into a prokaryotic host.

22. The method of claim 21, wherein said prokaryotic host is *E. coli*.

15 23. The method of claim 18, wherein said digestion is digestion with a restriction endonuclease.

24. The method of claim 18, wherein said amplification is accomplished with a polymerase.

20 25. The method of claim 24, wherein said polymerase is *Taq* DNA polymerase or a mutant, variant or derivative thereof.

26. A method of isolating or purifying one or more vectors comprising:

25 a) contacting a matrix or solid medium with a sample containing said vectors; and

 b) isolating all or a portion of said vectors from said medium.

27. The method of claim 26, wherein said medium protects against degradation of

30 said vectors.

28. The method of claim 26, wherein said sample is selected from the group consisting of host cells, viruses, extracts of host cells or viruses, lysates of host cells or viruses, host cell or virus debri, and combinations thereof.

5 29. A method for treating or manipulating one or more vectors comprising:
a) contacting a sample containing said vectors with a solid medium or matrix; and
b) treating or manipulating all or a portion of said vectors.

10 30. The method of claim 29, wherein said sample is selected from the group consisting of host cells, viruses, extracts of host cells or viruses, lysates of host cells or viruses, host cell or virus debri, and combinations thereof.

15 31. The method of claim 29, wherein said matrix or medium in FTA™ paper or derivatives, variants or modifications thereof.

32. The method of claim 29, wherein said treatment or manipulation is selected from the group consisting of digestion, synthesis, amplification, sequencing, transformation or transfection.